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August 28, 2003

**FILED ELECTRONICALLY**

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: *Ex Parte* Presentation in MB Docket No. 03-15

Dear Ms. Dortch:

Pursuant to Section 1.1206 of the Commission's rules, 47 C.F.R. § 1.1206, Starz Encore Group LLC ("Starz Encore") submits this notice of an *ex parte* presentation in the above-captioned proceeding.

Yesterday, August 27, 2003, John J. Sie (Chairman/CEO/Founder, Starz Encore), John Beyler (Vice President, Technology, Starz Encore), Thomas P. Southwick (Vice President, Corporate Communications, Starz Encore), Richard H. Waysdorf (Vice President, Business Affairs-Affiliate Relations, Starz Encore), and myself met with Chairman Michael K. Powell and Paul F. Gallant to discuss the digital television transition.

The subject of the meetings involved Starz Encore's concern with two aspects of the DTV transition: the phase-out of high definition sets with the traditional 4:3 aspect ratio based on the erroneous impression that only 16:9 sets can qualify as HDTV under the Commission's DTV standard; and the FCC decision to lock into its DTV standard a specific technology for compression, MPEG-2, without allowing for software upgradeable decoders that can handle current and future transmission standards. A copy of the presentation is attached hereto, and was provided to Chairman Powell and Mr. Gallant.

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Paul F. Gallant (w/o enclosure)

# **HDTV National Policy**

**Presentation to Chairman Michael K. Powell**

**John J. Sie  
August 27, 2003**

# **HDTV National Policy Could Be Disastrous**

- **US Government “Loaned” US Broadcasters Spectrum, one-for-one for 10 years to complete the transition to digital TV**
- **Six years into the transition only 1% of homes can view HDTV programming, which the government had expected would drive consumer acceptance of digital TV.**
- **The “Loaned” Spectrum is Critically Needed for:**
  - **Homeland Security**
  - **Local Emergency Services**
  - **\$70 billion of budgeted Spectrum Auction for Commercial Wireless**
- **Current Push by the FCC to the Broadcasting, Cable & Satellite industries to accelerate the transition could have disastrous effects**

# **A Flawed “Advanced Television Standard”**

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**Two seemingly minor requirements are at the core of the Great Flaw**

- 1. FCC’s “Marketplace” Formats (18) exclude the current image shape (4 x 3) to qualify as “high definition” causing Consumer Confusion and Frustration**
- 2. FCC’s Digital Compression Standard (Spectrum Efficiency) is fixed without upgradability.**

**The standard is already obsolete**

**US Broadcast, Cable, & Satellite industry will become second class, non-competitive**

# 1. The TV Image Shape (Aspect Ratio) Problem

- The Image Shape of TV sets was set by NTSC for more than 50 years. The Aspect Ratio is 4 x 3.
- The new Digital TV Standard set by ATSC, defined a new wider screen shape (16 x 9) at high resolution as “High Definition”.
- However, the ATSC excluded the same high resolution but with the current shape (4 x 3) as not “High Definition”.
- The public is very confused and frustrated using the new shape of 16 x 9 digital TV sets at home... Hence the low adoption rate.

## **2. Compression Standard Problem**

- **The ATSC defined a fixed standard for Video Compression called MPEG-2 for digital television**
  - Didn't foresee the inevitable technology advances in compression
  - Already obsolete before adoption reaches 1% !
- **Disastrous effects**
  - America will be stuck with a 2nd class broadcasting system - ripple effect to other platforms, satellite, cable (Plug & Play)
  - Broadcasters seek more spectrum for another digital transition
  - Major uproar when the public realizes that the current DTV sets not upgradable to any future advanced DTV systems

**PUBLIC AND NATIONAL INTERESTS WILL BE TOTALLY ABROGATED**

# **Solution: Simple, Clear and Effective**

- For the quickest transition to DTV, and to maximize public and national interests, FCC should:

- **Step in**

- Give 4x3 HDTV status

- **Step out**

- Don't limit ATV decoding to MPEG-2

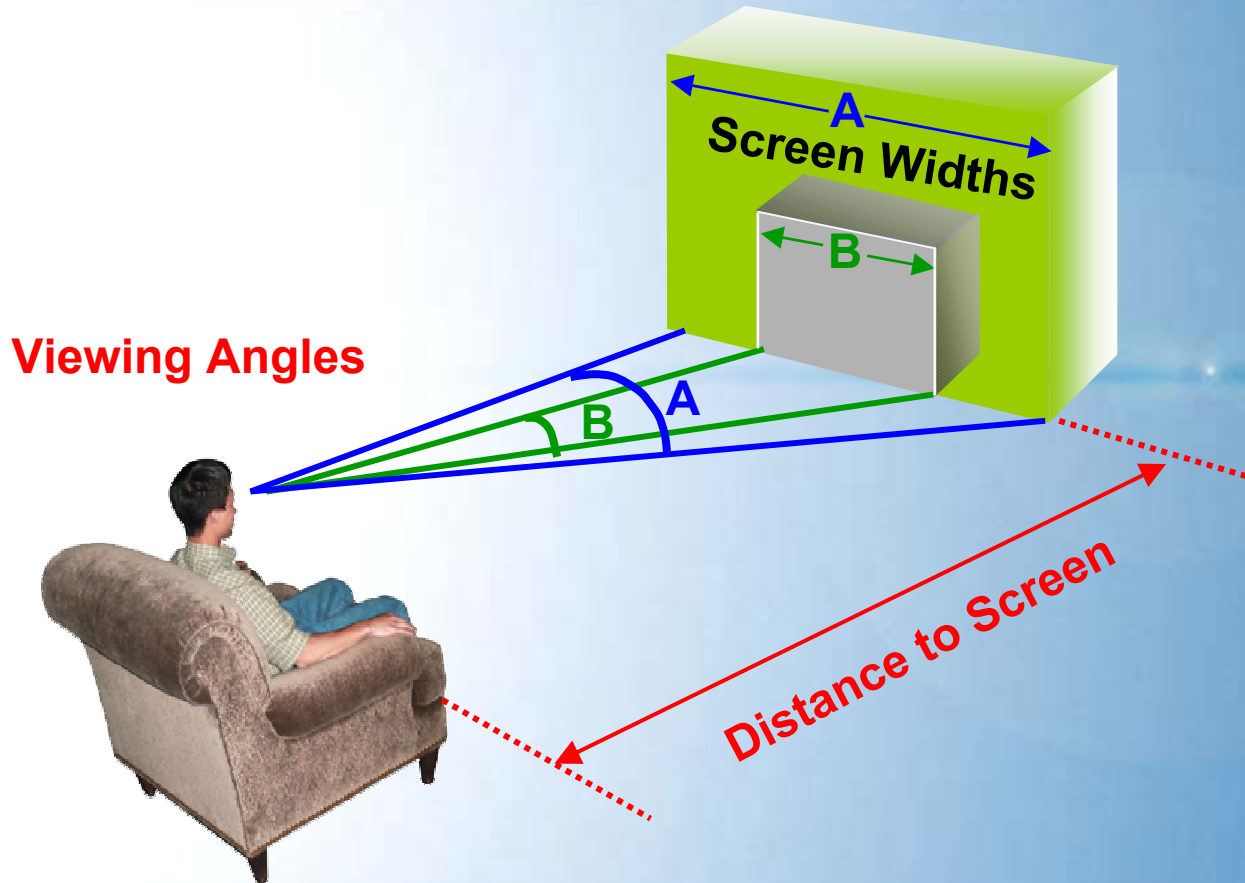
- Use upgradable system

# Aspect Ratio

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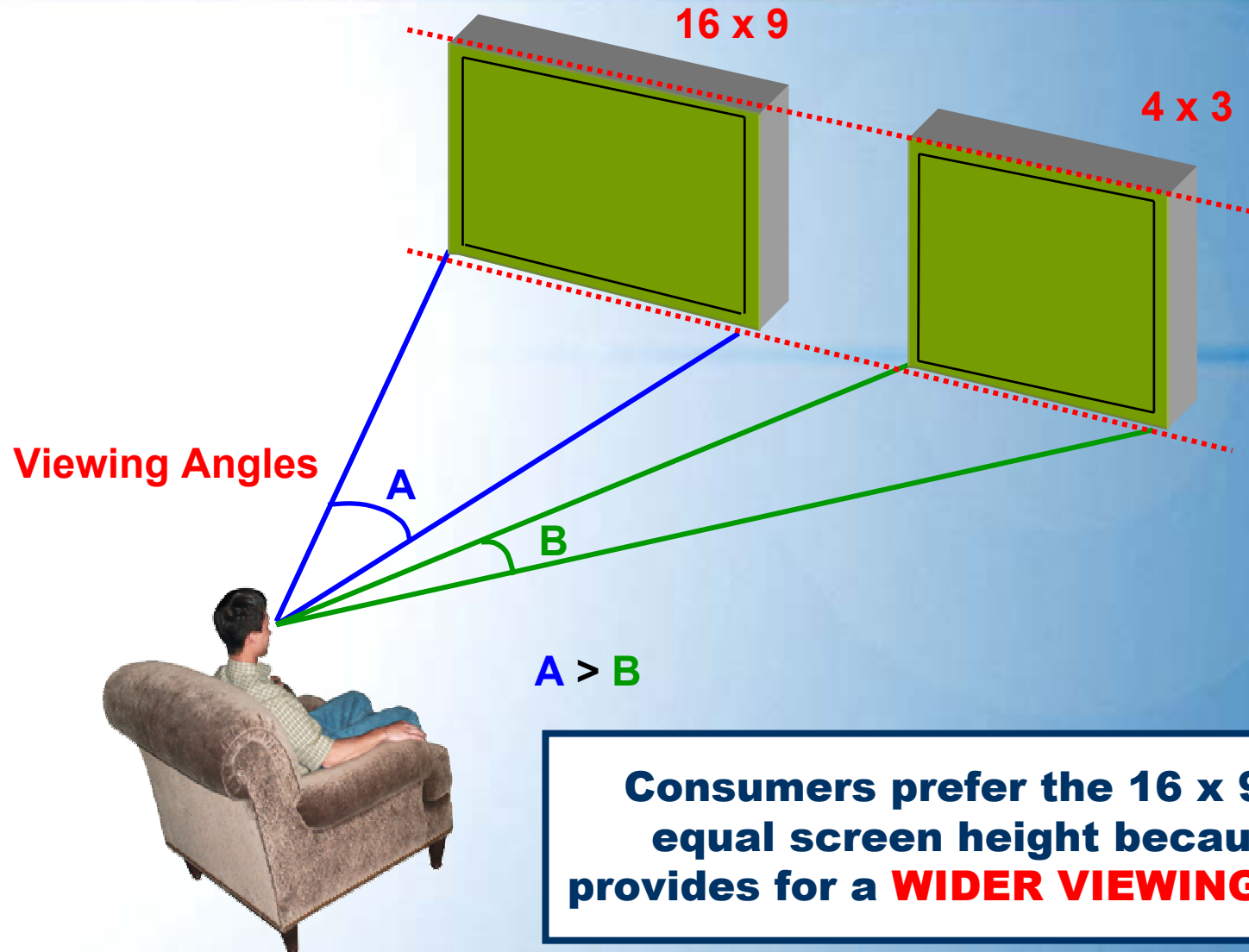
A seemingly logical but **incorrect** premise leads to diametrically opposite conclusions on aspect ratio with many unintended consequences

# Wide Viewing Angle is Determined by Screen Width, Not Screen Height

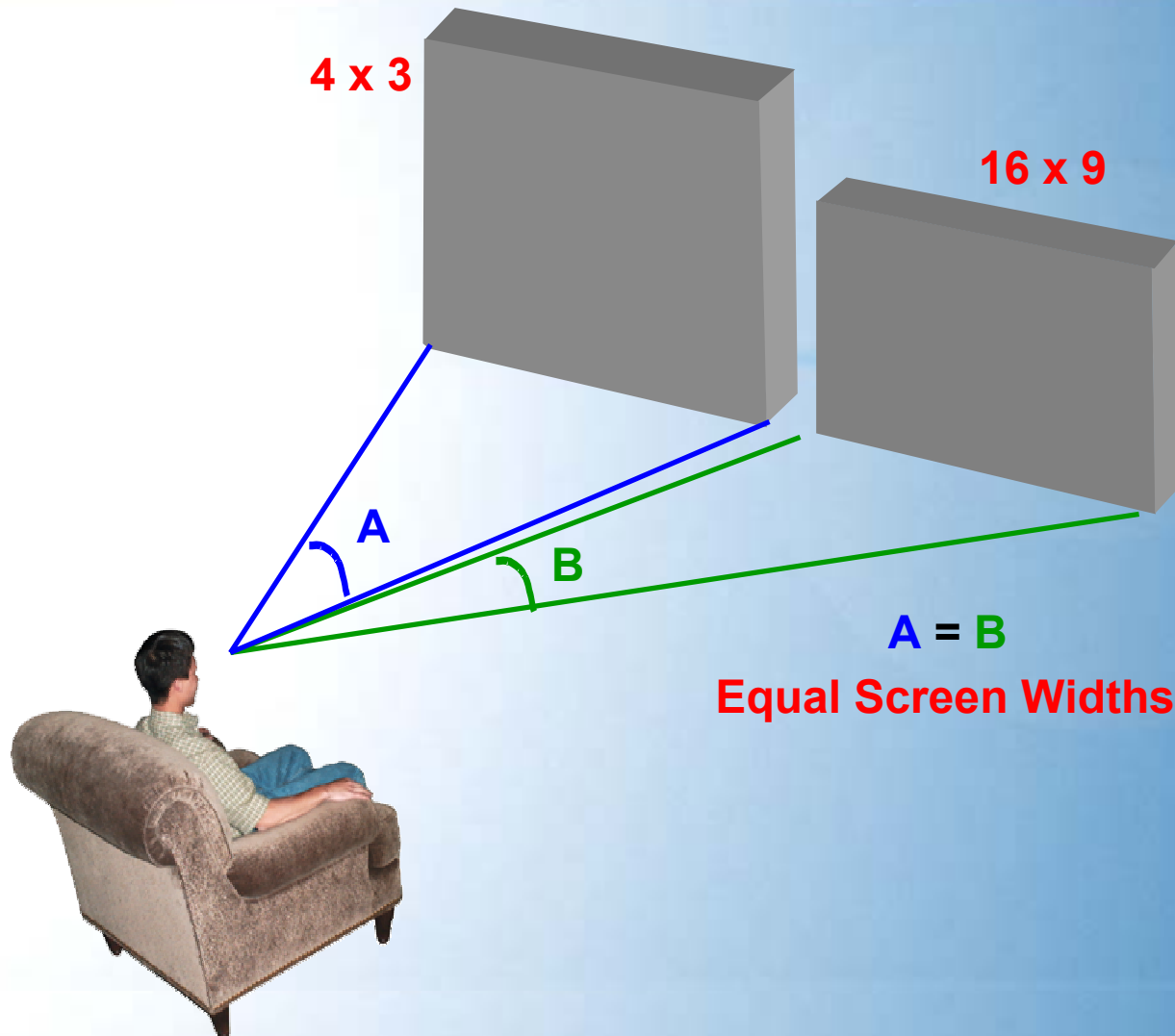


For large TV set in home, screen width, not height, is important

# But Almost all ATV Demonstrations Use The **WRONG** Premise of “Same Height” to Determine Format Preferences



# With Equal Viewing Angles (Same Screen Width), Consumers Prefer Taller Screen of 4 x 3



# Public Dislocation From Aspect Ratio Transition Problems

**Origination &  
Transmission**

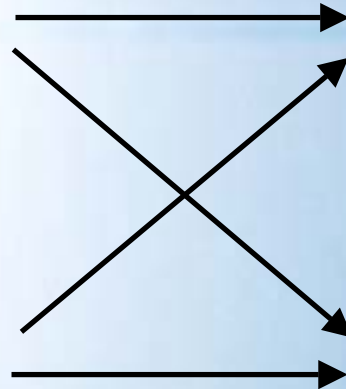
**4 x 3  
Image**

**16 x 9  
Image**

**Reception &  
Display**

**4 x 3  
Display**

**16 x 9  
Display**



# Case A

## Ideal World (Requires Double the Spectrum)

16 x 9 Image

16 x 9 Transmission

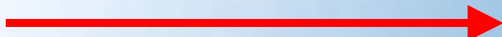


16 x 9 Display



4 x 3 Image

4 x 3 Transmission



4 x 3 Display



# A Constant Screen Width (Equal Viewing Angle) 16 x 9 Image on 16 x 9 Display

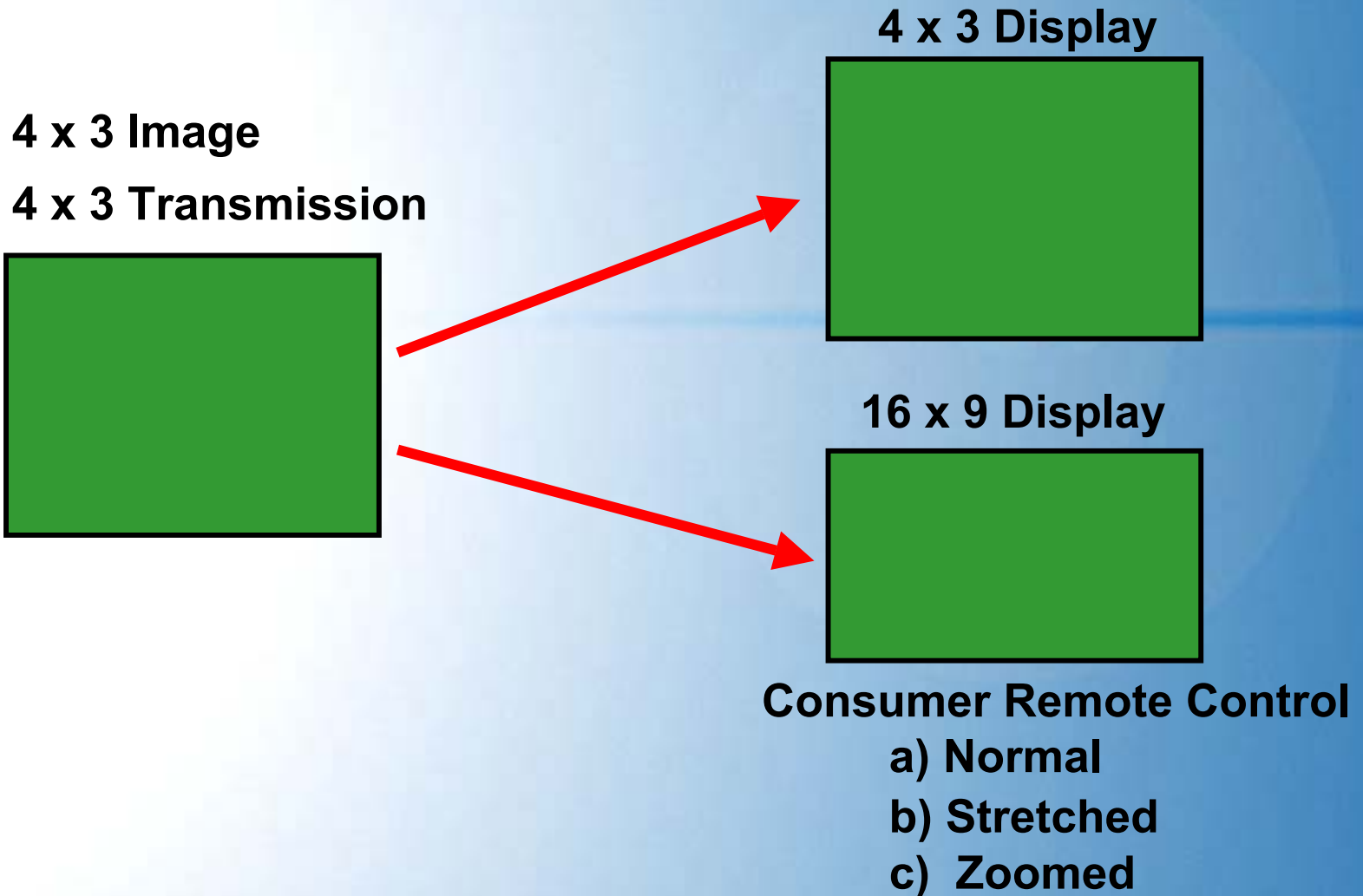


# A Constant Screen Width (Equal Viewing Angle) 4 x 3 Image on 4 x 3 Display



# Case B

**~ 90% of Multi-Channel Viewing**



**B** Constant Screen Width (Equal Viewing Angle)  
4 x 3 Image on 4 x 3 Display



**B** Constant Screen Width (Equal Viewing Angle)  
4 x 3 Image on 16 x 9 Display - **NORMAL**



**B** Constant Screen Width (Equal Viewing Angle)  
4 x 3 Image **STRETCHED** to Fill 16 x 9 Display

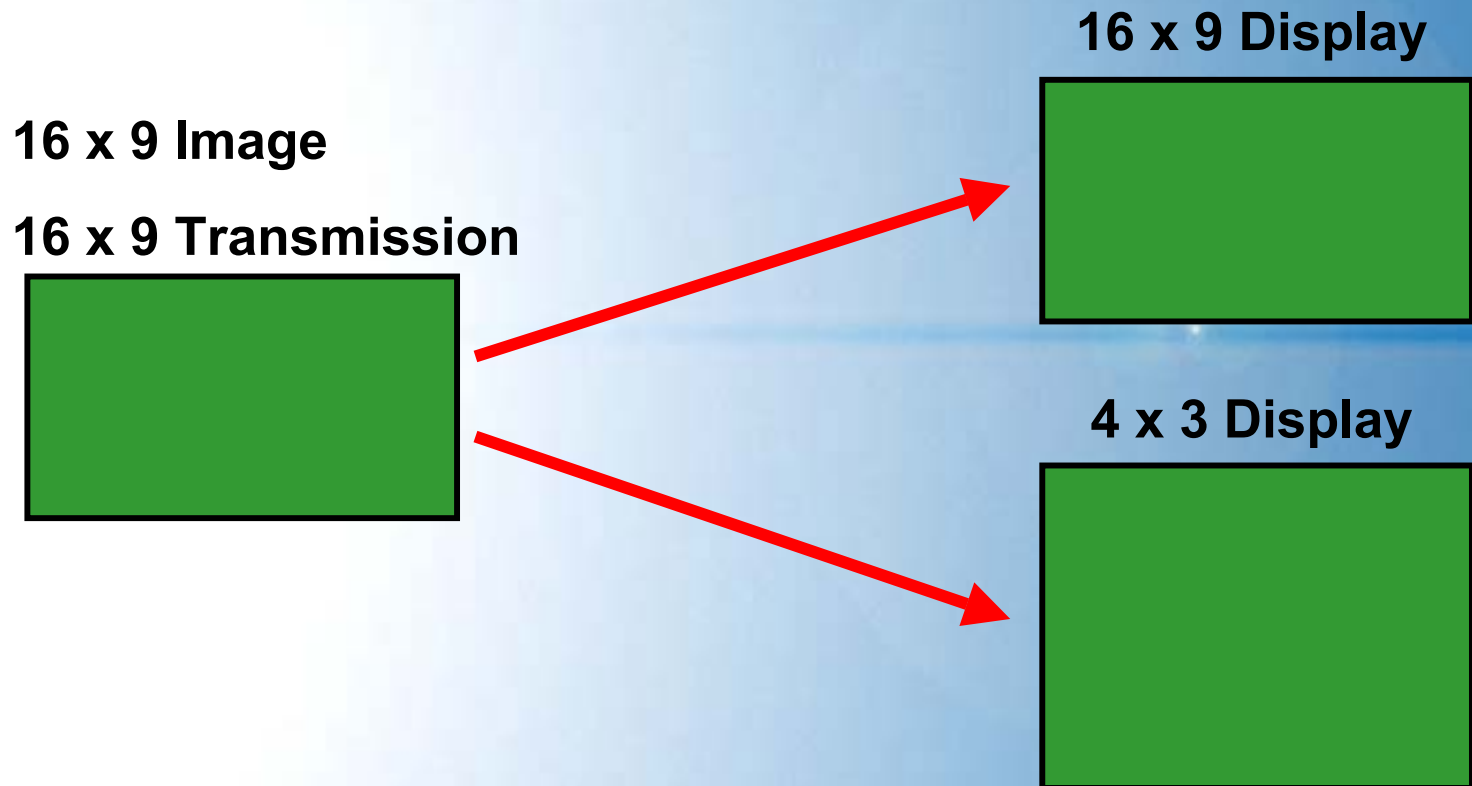


**B** Constant Screen Width (Equal Viewing Angle)  
4 x 3 Image **ZOOMED** to Fill 16 x 9 Display (lost Content and Resolution)



# Case C

## HDTV Transmission: STARZ! HD, HBO HD, ...



# C Constant Screen Width (Equal Viewing Angle) 16 x 9 Image on 16 x 9 Display



**C** Constant Screen Width (Equal Viewing Angle)  
16 x 9 Image on 4 x 3 Display (Same Image Size)

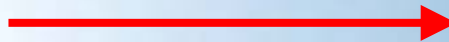


# Case D

## Sports: ESPN HD, HD Net, ...

16 x 9 Image

16 x 9 Transmission



16 x 9 Display



4 x 3 Image

4 x 3 Transmission



4 x 3 Display



**D** Constant Screen Width (Equal Viewing Angle)  
16 x 9 Image on 16 x 9 Display



**D** Constant Screen Width (Equal Viewing Angle)  
4 x 3 Image on 4 x 3 Display



# Case E

Film buffs and Hollywood demand 16 x 9  
“widescreen” over 4 x 3 because:

**YOU LOSE CONTENT FROM THE  
THEATRICAL VIEWING EXPERIENCE  
DURING PAN & SCAN TO 4 x 3**



# Theatrical Framing



**Austin Powers in Goldmember  
as shown in movie theaters**

# **4 x 3 TV Framing: 78% Bigger Image**

**TV HAS MORE CONTENT THAN SHOWN IN THEATERS**



**Hollywood values the television market (home-vid, pay-tv, etc.), changes paradigm on 4 x 3**

# In Theaters



**Blackhawk Down**

# TV at Home



4 x 3 Display  
Blackhawk Down

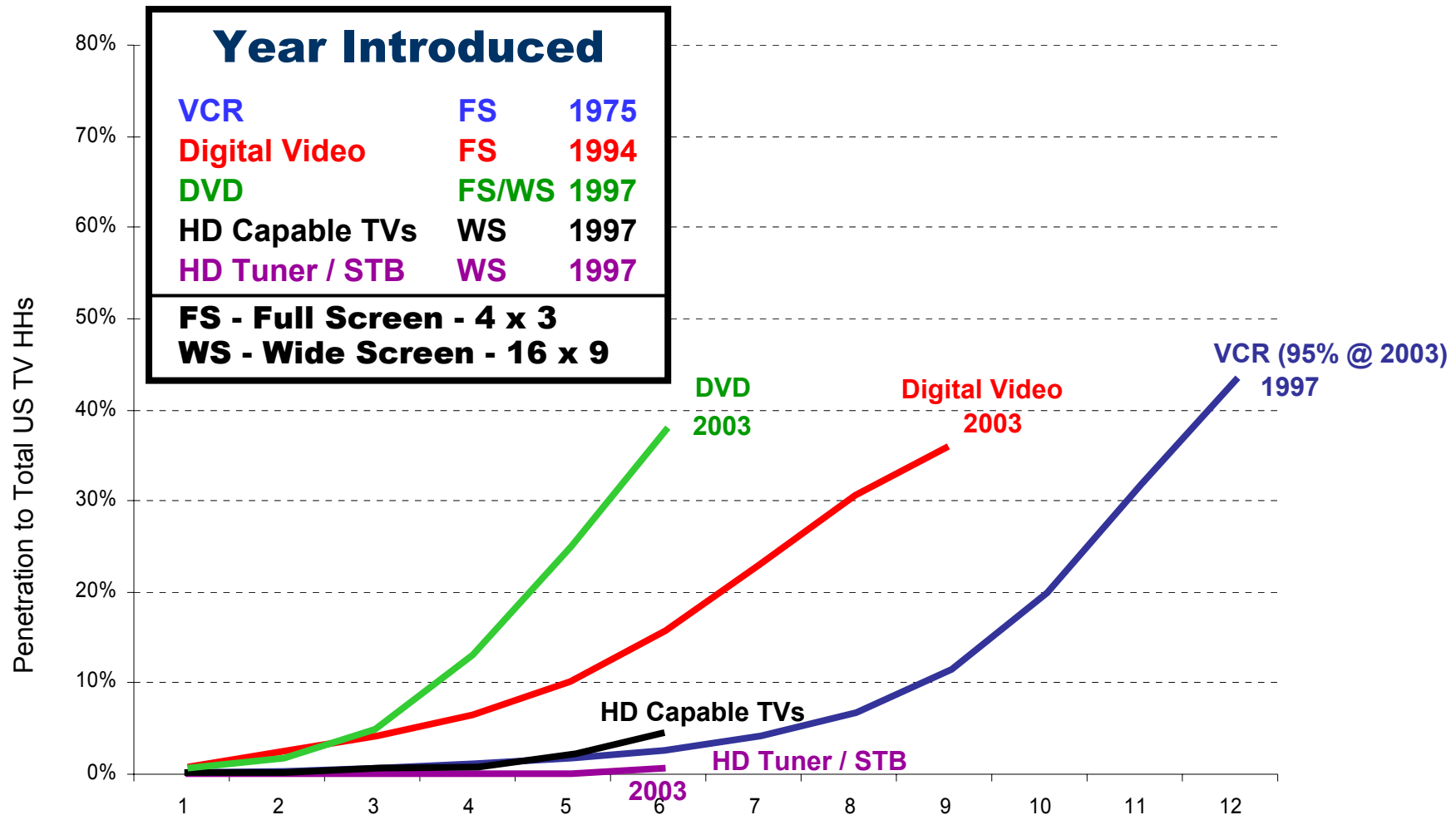
# Sample of Films With More Content for 4 x 3 Video Than Theatrical

Title	Release Year
Austin Powers in Goldmember	2002
The Bourne Identity	2002
Harry Potter and the Chamber of Secrets	2002
Black Hawk Down	2001
The Fast and the Furious	2001
Gosford Park	2001
Harry Potter and the Sorcerer's Stone	2001
Lord of the Rings: The Fellowship of the Ring	2001
Crouching Tiger, Hidden Dragon	2000
Gladiator	2000
Austin Powers: The Spy who Shagged Me	1999
Matrix	1999
Seven	1995

**85 - 90% of Hollywood's Top Movies**

# Adoption From Year of Introduction

## DVD Works for Both 4x3 and 16x9



32 DVD's rapid adoption rate... works for full and wide screens... cost of DVD players \$1,000 to \$60 in 6 years

# TV Set Comparisons

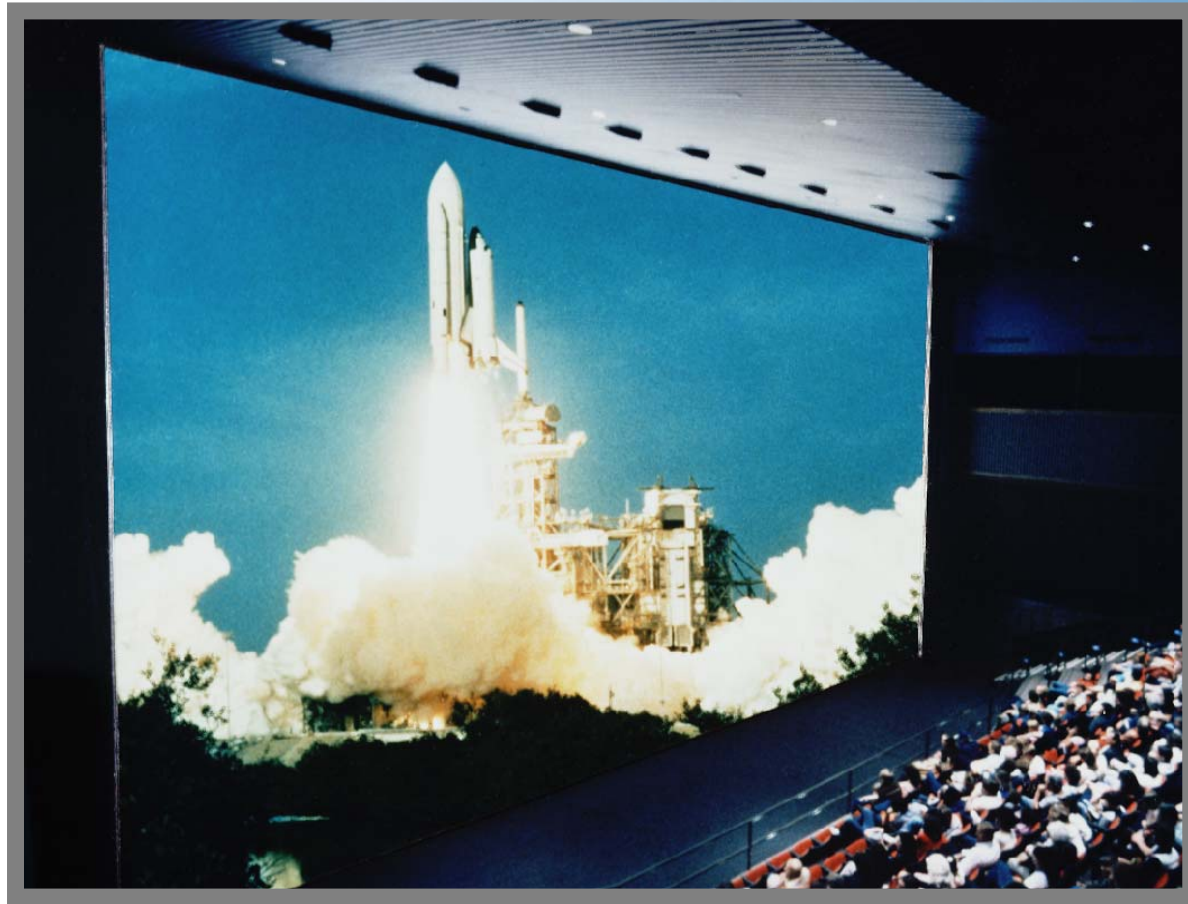
## Mitsubishi 2003 Models



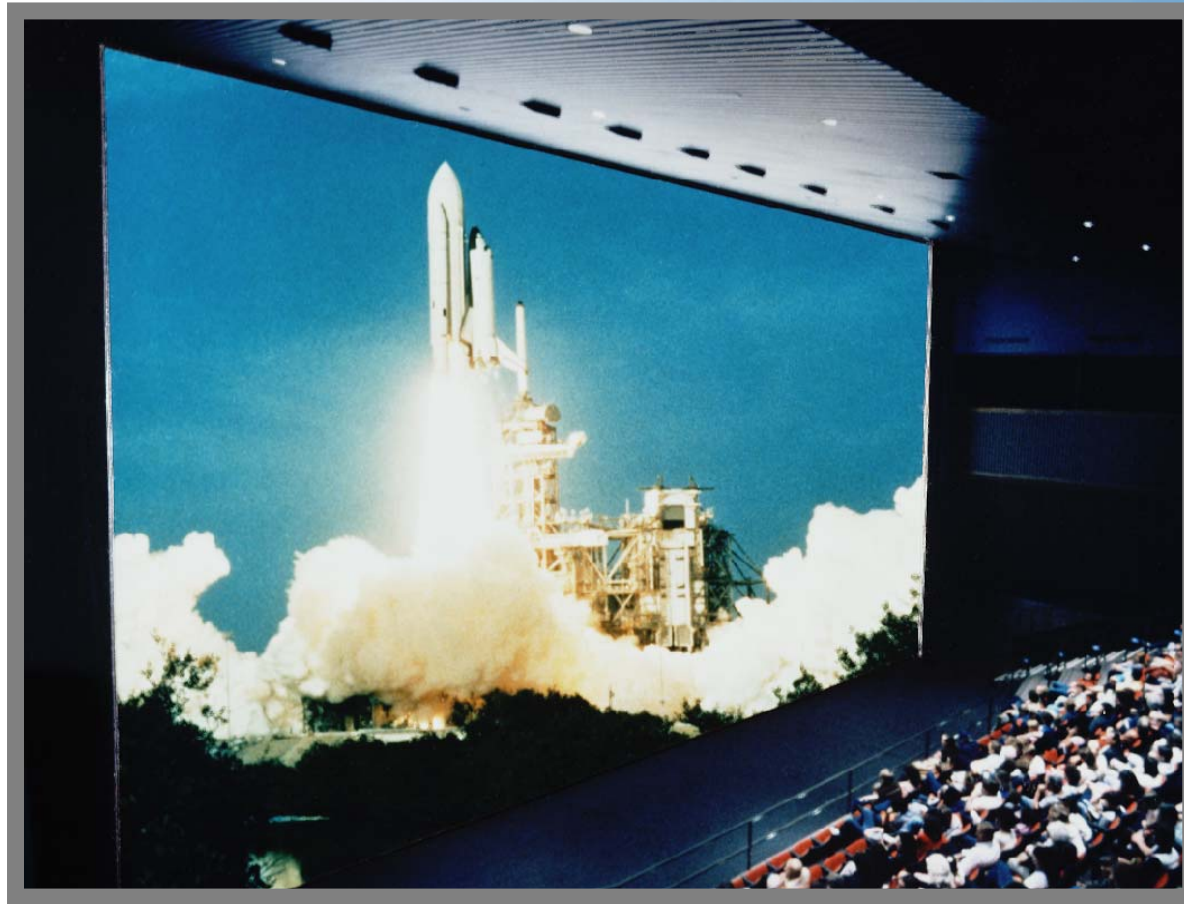
Model	VS-60111	WS-55311
Aspect Ratio	4 x 3	16 x 9
Width	50 1/2"	50 1/2"
Diagonal	60"	55"
Scan Formats	480p & 1080i	480p & 1080i
MSRP	\$2,499	\$2,599

**4 x 3 1080i sets being phased out because they are not defined as HDTV**

# The Ultimate in Wide Screen & Resolution: IMAX



# The Ultimate in Wide Screen & Resolution: IMAX



**ASPECT RATIO: 4 x 3**

# 4 x 3 “HDTV” Will Accelerate the Digital Transition

4 x 3 HDTV Sets Yield Better Viewing Experiences for Same Screen Width

IMAGE

← 4 x 3 SET → 16 x 9 SET →

STD Broadcast,  
Cable, Satellite  
or

4 x 3 HDTV Program

**90% of Viewing**



16 x 9 HDTV Program

**10% of Viewing**



# **FCC's ATV Standard Locked to MPEG-2 Compression**

- Technology advances relentlessly in processing, memory, compression algorithms
- MPEG-2 already technically obsolete (> decade old) @ < 1% adoption rate
- All current DTV sets are HARDWIRED with MPEG-2 chips... not compatible with any future advanced DTV systems
- US DTV broadcast system will be 2nd class, causing a ripple effect on US cable and satellite... P&P
- Public cannot afford to buy future incompatible DTV set after buying the current ATV standard DTV set

# **Software Upgradable Decoder Is The Only Solution**

- **FCC should change its ATV standard to:**
  - **Permit technological advances with backward compatibility use software upgradable, hardware scalable decoders in DTV sets and set-tops**
- **Same as standard practice in broadband computer industry...**  
**e.g., AOL 6.0 → AOL 7.0 → AOL 8.0 → ...**
- **FCC decision for “Backward Compatibility” served the public well during the B&W to Color Transition. It should do the same in Digital TV**

# **Huge Benefits of Upgradable Compression Decoders**

- **Maintain US superiority in competitive DTV technology**
- **Public buys expensive DTV sets with confidence of longevity...quicker reclamation of spectrum**
- **Continuing spectrum efficiency**
  - e.g., Use of H.264 instead of MPEG-2 can save HDTV broadcast spectrum by 2.5 times (2.4 MHz vs. 6 MHz)
- **More compression improvements to come**

# **Transition From Fixed to Upgradable Compression is Manageable -- Now**

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- **Only 5% of the public have purchased DTV sets.**
- **Fortunately, ~100% of these are really “HDTV capable” TV monitors ... will accept future generations of decoders**
- **Less than 0.5% of public have HDTV tuners with fixed MPEG-2 decoders (a few hundred dollars to replace)**

# Upgradable Media Processor Chips Exist Today

## Company

TEXAS Instruments

Royal Philips Electronics

Hitachi Ltd.

Atsana Semiconductor Corp.

Equator

## Chip

TMS320DM642

Nexperia pnx1500

Broadgear Series

J2210

MAP-CA

## Functionality

Backward  
compatible to  
MPEG-2,  
MPEG-4, H.264

# Summary

- For the quickest transition to DTV, and to maximize public and national interests, FCC should:

- **Step in**

- Give 4x3 HDTV status

- **Step out**

- Don't limit ATV decoding to MPEG-2

- Use upgradable system